

Purpose of This Meeting

- ♣ Continue Public Involvement
- ♣ Review
 - ♣ Project Background (see handout)
 - ♣ Purpose and Need (see handout)
 - ♣ Public Involvement (see handout)
 - ♣ Comments received at Public Meeting No. 1
 - ♣ Comments received at Public Meeting No. 2
- ♣ Discuss Alternatives
- ♣ Discuss Flexibility in Highway Design
- ♣ Discuss Right of Way
- ♣ Obtain public input relating to alternatives and roadway cross section currently being evaluated

Alternatives

♣ No action

- ♣ Minor restoration types of activities (safety and maintenance improvements, etc.)

♣ Transportation System Management (TSM)

- ♣ Activities which maximize efficiency of the existing system (fringe parking, ridesharing, signal timing optimization, etc.)
- ♣ Efforts to reduce demand to alleviate the need for new construction (ride sharing, transit promotion, staggered or flexible work hours, walking, biking, telecommuting, etc.)

♣ Transit or multi modal

- ♣ Light rail, bus, pedestrian, bicyclists

♣ Build Alternatives

- ♣ Improvements of existing highways
 - ♣ Syracuse Road (Three Lane, Five Lane, Seven Lane)
 - ♣ Other area roadways
- ♣ New roadway corridor

The EIS shall discuss a range of alternatives, including all “reasonable alternatives” under consideration and those “other alternatives” which were eliminated from detailed study.
(23 CFR 771.123(c))

Typical Cross Sections (Three Lane, Five Lane, Seven Lane)

SEE CROSS SECTION BOARD

Alternatives – Capacity vs. Demand

Alternative	Capacity - LOS D Traffic (vehicles per day)	Demand - Year 2030 Traffic (vehicles per day)
No action	11,500	19,500
TSM Alternative	12,000	20,000
Transit	12,000	20,000
On-corridor Three Lane*	13,500	24,000
On-corridor Five Lane*	30,500	26-30,000
On-corridor Seven Lane*	46,000	26,000
Off-corridor Five Lane*	12,000	21,000

*Includes TSM and Transit

Alternatives Selected For Preliminary Study

♣ No action

- ♣ Satisfies NEPA's "No-action" requirement
- ♣ Can be used as a baseline to compare impacts of build alternatives

♣ Five Lane Build Alternatives*

- ♣ On corridor widening Alternatives
 - ♣ Widening equally about the existing centerline
 - ♣ North Shift
 - ♣ South Shift
- ♣ Off corridor Alignments

Reasonable alternatives must meet selection criteria and be technically feasible, economically possible, and politically practical.

*Build alternatives include TSM and Transit

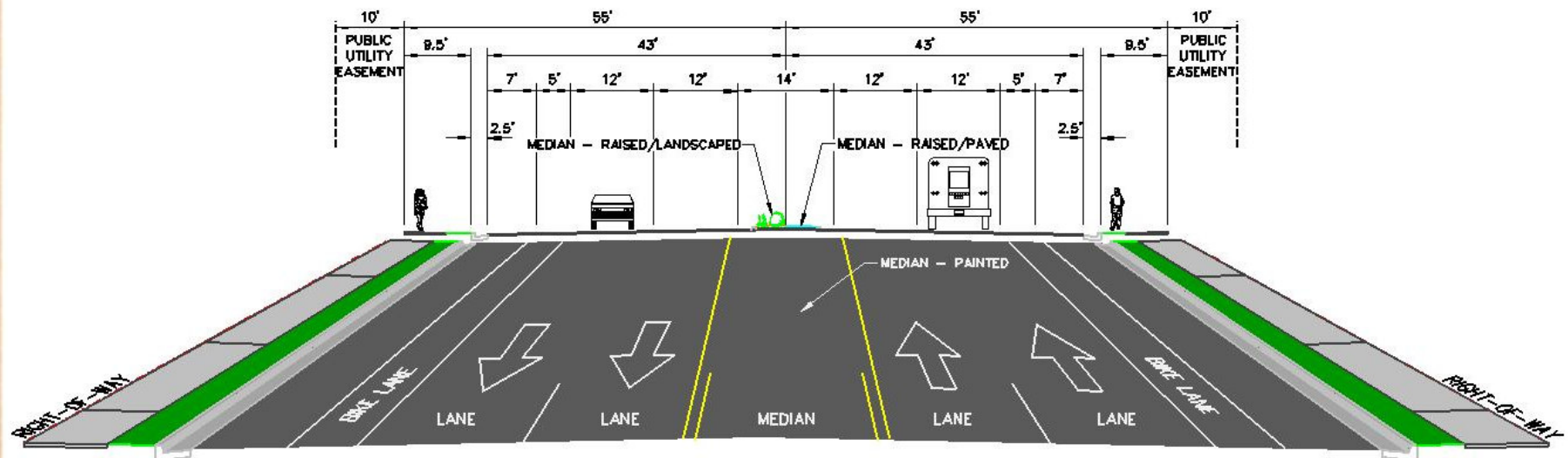
Summary of Initial Five Lane Alternatives

Alternative	Description
Option A – Centerline	<ul style="list-style-type: none"> • Widens roadway equally to both the north and south
Option B – South Shift 1	<ul style="list-style-type: none"> • Widens both north and south at 1000 West intersection • Widens to the south between about 1050 W and 1650 W • Widens to the north between 1650 W and 2000 W
Option C – South Shift 2	<ul style="list-style-type: none"> • Widens both north and south at 1000 West intersection • Widens to the south between about 1050 W and 1750 W • Widens to the north between 1750 W and 2000 W
Option D – North Shift	<ul style="list-style-type: none"> • Widens both north and south at 1000 West intersection • Widens to the north between about 1050 W and 2000 W
Option E – Avoidance 1	<ul style="list-style-type: none"> • Widens both north and south at 1000 West intersection • Shifts off-corridor (400 ft to south) between 1050 W and 1750 W • Widens to the north between about 1750 W and 2000 W
Option F – Avoidance 2	<ul style="list-style-type: none"> • Widens both north and south at 1000 West intersection • Shifts off-corridor (400 ft to south) between about 1050 W and 1600 W • Shifts off-corridor (400 ft to north) between about 1600 W and 1975 W • Widens to the north between about 1975 W and 2000 W

5-lane design alternatives

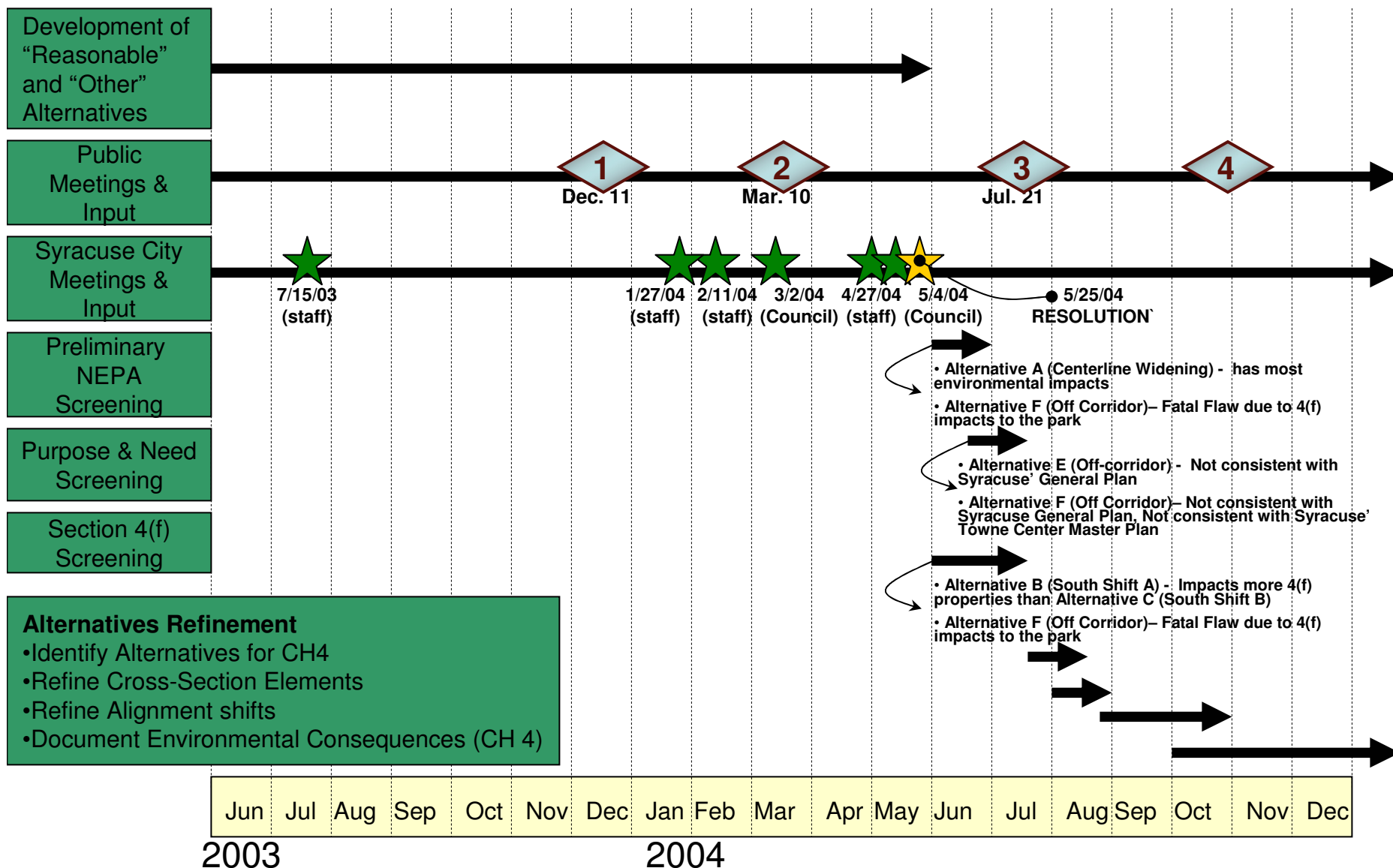
SEE ALIGNMENT MAPS

5-lane cross section (110-ft)



Alternatives Development, Screening, & Refinement

(June 2003 – December 2004)



What is Section 4(f)?

- ♣ Federal regulations require special effort to preserve the natural beauty of public park & recreation lands, wildlife & waterfowl refuges, and historic sites
- ♣ Impacts to Section 4(f) properties are allowed only if:
 - ♣ There is no prudent & feasible alternative to using that land and
 - ♣ The project includes all possible planning to minimize harm to the Section 4(f) property resulting from the project
- ♣ Section 4(f) properties along Syracuse Road include:
 - ♣ Historic Houses
 - ♣ Park / Recreation property
- ♣ Historic Houses are eligible for Section 4(f) if:
 - ♣ Structure is at least 45 years old
 - ♣ Has historic integrity and value
 - ♣ No major alterations (siding, roofing, windows, additions, etc)

Summary of Impacts for Preliminary 110-ft Five Lane Alternatives shown at Public Meeting No. 2 (March 2004)

These are only some of the impacts. Not all impacts have been evaluated at this point in the study.

Alternative	Total # of Relocations ¹	Total # of Proximity Impacts ²	# of 4(f) ³ Relocations	# of Other 4(f) ³ Properties With Right of Way Required
Option A – Centerline	15	41	5	23
Option B – South Shift 1	25	2	14	4
Option C – South Shift 2	24	1	10	6
Option D – North Shift	39	1	18	1
Option E – Avoidance 1	13	1	3	5
Option F – Avoidance 2	11	1	3	4

1 Relocations have been identified wherever the resulting setback from the road would be 32% or less of the existing setback. Other relocations may be identified later on a case by case basis.

2 Proximity impacts are noted wherever construction of the road requires right-of-way to be acquired from the property AND the resulting setback is less than the Syracuse City ordinance of 25 feet for a front yard, 10 feet for a side yard, or 30 feet for a back yard. The proximity impacts shown here are approximations only and are subject to change based on further study.

3 4(f) properties include parks and historic structures (45 years old or more). These properties are protected under federal law and special consideration must be given to them.

Preliminary Screening (Syracuse City Resolution)

♣ Syracuse City approved Resolution R04-05 on May 25, 2004:

- ♣ Alternatives E and F would create a hardship to the city (would dissect over 50 acres of commercial property, reducing or eliminating ability for their development)
- ♣ Mayor and Council unanimously support a straight alignment for Syracuse Road (Alternatives A,B,C,D)
 1. Conforms with City's General Plan
 2. Does not dissect commercial acres
 3. Still protects properties having most historic importance
 4. City has been working with commercial developers for property south of Syracuse Road
 5. Traffic impacts are better addressed with straight alignment
 6. Existing homes will not be left with double fronting lots
 7. The historic alignment of Syracuse Road is straight and has been planned for in the City's planning process

Preliminary Screening (NEPA)

- ♣ Alternatives A through F were evaluated for the following factors:
 - ♣ Economic, Social, Relocations, Proximity Impacts, Pedestrians/Bicyclists, Air Quality, Noise Impacts, Water Quality, Historical/Archaeological, 4(f) impacts, Hazardous waste, Visual
- ♣ Alternative A (Centerline widening) had the most environmental impacts in 6 of 15 categories and had the most environmental impacts overall
- ♣ Alternative B and C (south shift alternatives) environmental impacts are similar, but B would have more impacts to historic properties

Recommendations:

- *Alternative A has the most environmental impacts and will be removed from further study unless the public strongly supports the alternative*

Preliminary Screening (Purpose and Need)

Category		Description	Alternatives					
			A	B	C	D	E	F
			Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Purpose And Need	Need	System Linkage	YES	YES	YES	YES	YES	YES
		Regional Growth	YES	YES	YES	YES	YES	YES
		Capacity and Travel Demand	YES	YES	YES	YES	YES	YES
		Safety	YES	YES	YES	YES	YES	YES
	Purpose	Meet regional east-west travel demand for NW Davis County	YES	YES	YES	YES	YES	YES
		Consistent with current transportation standards	YES	YES	YES	YES	YES	YES
		Consistent with state & regional transportation plans	YES	YES	YES	YES	YES	YES
		Consistent w/ Syracuse' Transportation plan	YES	YES	YES	YES	YES	YES
	Other Goals & Objectives	Incorporates multi-modal facilities within the corridor	YES	YES	YES	YES	YES	YES
		Consistent with The Syracuse General Plan	YES	YES	YES	YES	NO	NO
		Consistent with The Syracuse City Town Center Plan	YES	YES	YES	YES	YES	NO
		<i>SATISFIES PURPOSE AND NEED</i>	YES	YES	YES	YES	NO	NO

Recommendations:

- Alternative E doesn't meet Purpose & Need (not consistent with Syracuse' General Plan) and should be eliminated from further study
- Alternative F doesn't meet Purpose & Need (not consistent with Syracuse' General Plan and Town Center Plan) and should be eliminated from further study

Preliminary Screening (Section 4(f))

Alternative	Number of Potential Impacts to Section 4(f) Properties	
	“Adverse Effect” (total takes or property acquisition/impacts within about 15 feet of structure)	“No Adverse Effect” (Minor property acquisition/impacts)
Option A – Centerline	5	23
Option B – South Shift 1	14	4
Option C – South Shift 2	10	6
Option D – North Shift	18	1
Option E – Avoidance 1	3	5
Option F – Avoidance 2	3* (includes impact to park)	4

Recommendations:

- *Alternative B should be eliminated from further study due to increased impacts to Section 4(f) properties over Alternative C*
- *Alternative F should be eliminated from further study due to impact to park*

Summary Alternative Recommendations

Alternative	Recommended for Removal from Further Study			Recommended for Further Evaluation in EIS
	Environmental Impacts Screening	Purpose and Need Screening	Section 4(f) Screening	
No Build				Y
Option A – Centerline	Y			
Option B – South Shift 1			Y	
Option C – South Shift 2				Y
Option D – North Shift				Y
Option E – Avoidance 1		Y		
Option F – Avoidance 2		Y	Y	

Cross-section Elements

- ♣ Median
- ♣ Travel Lanes
- ♣ Shoulders
- ♣ Bicycle Lanes
- ♣ Sidewalks
- ♣ Parkstrips
- ♣ Utility and Landscape Areas
- ♣ Easements

Five Lane Typical Cross Section

MEDIANS

- 1. Painted**
 - Left turns allowed everywhere along corridor
 - Higher number of vehicle conflict points
 - Low maintenance
 - Not recommended for corridors with more than 24,000 to 28,000 vehicles per day
- 2. Raised Paved Median**
 - Provides increased safety over painted medians
 - Left turns allowed at certain locations
 - Reduces the number of vehicle conflict points
 - Provide refuge for pedestrians at crossings
 - Low/no maintenance
- 3. Raised Landscaped Median**
 - Provides increased safety over painted medians
 - Left turns allowed at certain locations
 - Reduces the number of vehicle conflict points
 - Provide refuge for pedestrians at crossings
 - City would maintain landscaping

Raised Median Guidelines

- At a minimum, there may need to be raised medians at major intersections
- If > 28,000 vehicles per day, raised medians should be considered
- Raised medians experience 78% fewer pedestrian fatalities per 100 miles
- Two Way Left Turn Lanes (TWLTL) are only safer than raised medians when traffic volumes are low and there are few access points (less than 60 per mile)



SIDEWALKS AND PARKSTRIPS

Sidewalks

- Increases pedestrian safety
- Can be used with parkstrips
- Minimum width 4-ft (requires 5ft x 5ft passing area every 200ft)
- Desirable width 6-ft
- Can be used without parkstrips (minimum width 6-ft, desirable width 8-ft)

Parkstrips

- Improves safety by increasing distance
- Between sidewalks and travel lanes
- Improves aesthetics
- Can be paved or landscaped
- Requires additional right-of-way

Clear-Zone

For 45 mph road, need 14 to 16 feet of separation between travel lane and fixed objects (fire hydrants, light/power poles, trees larger than 4-inch diameter, etc.)



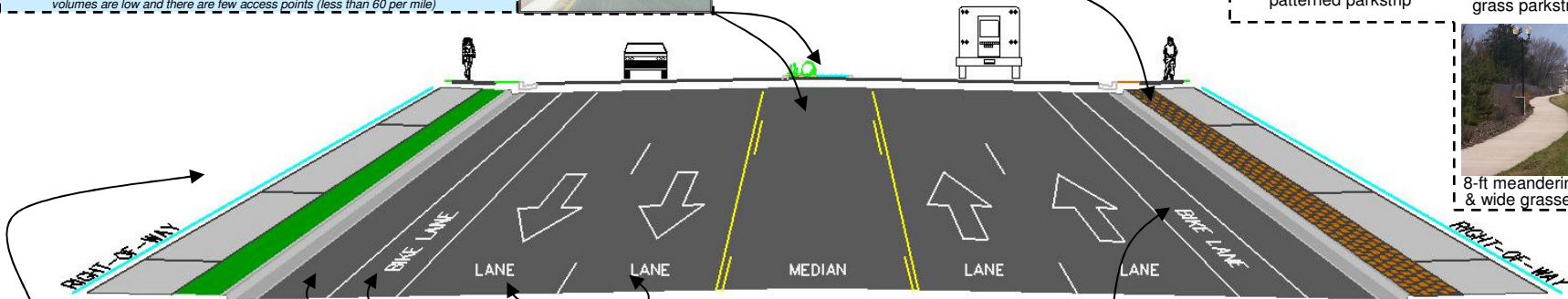
sidewalk & parkstrip



5-ft sidewalk & 5-ft grass parkstrip



8-ft meandering sidewalk & wide grassed parkstrip



EASEMENTS

Utility Easements

- Syracuse City is interested in burying overhead utilities
- If overhead utilities are buried, a utility easement will be required from property owners (typical about 10-ft wide, in addition to any irrigation easements)
- Buried utilities require cost participation by Syracuse City

Irrigation Easements

- An easement behind the sidewalk would be necessary for the relocation of irrigation features
- Easement would be about 10 feet wide (in addition to any other utility easements which may be required)
- Replacement of irrigation features may include construction of turnout boxes, pipelines, ditches, etc.

SHOULDER

Shoulder Uses/Advantages

- Facilitate driveway entrance/exit
- Snow Storage
- Bus service
- Garbage collection
- Mail delivery
- Parking
- Emergency Vehicles
- Disabled vehicles
- Bicycle travel

Shoulder Options

- 12 ft wide was used on Syracuse Road between Main Street and 1000 W
- Narrower (<12-ft) shoulders require less right-of-way, but decrease shoulder benefits/uses
- Wider (>12-ft) requires additional right-of-way

TRAVEL LANES

- Necessary to accommodate traffic volumes at an appropriate level of service
- 12 foot wide lanes are recommended
- Narrower lanes can be used, but they reduce capacity and safety

BICYCLE ROUTE

- Wasatch Front Regional Council's trails master plan includes a bicycle lane along Syracuse Road
- Provides a striped and signed lane for one-way bicycle travel on a roadway shared with cars
- Requires a 5-ft bike lane in both directions



5' Bicycle Lane 7' Shoulder

Irrigation Easement



- An easement behind the sidewalk will be necessary for the relocation of irrigation features
- The easement will probably be about 10 feet wide (in addition to any other utility easements which may be required)
- Replacement of irrigation features may include construction of turnout boxes, pipelines, ditches, etc.



Utility Easements

- ♣ Syracuse City is interested in burying overhead utilities
- ♣ If overhead utilities are buried, a utility easement may be required from property owners (typically about 10-ft wide)
- ♣ Buried utilities are a betterment and will require cost participation by Syracuse City

Affected Environment and Environmental Consequences

- ♣ The EIS will provide a concise description of the existing social, economic, and environmental setting for the area affected by all alternatives presented in the EIS
- ♣ The EIS will identify the social, economic, and environmental effects of alternatives under consideration and will describe the measures proposed to mitigate adverse impacts

Potential Environmental Factors

These are impacts most commonly encountered by highway projects. These factors should be discussed for each reasonable alternative where a potential for impact exists

- | | | |
|------------------------------|-----------------|-----------------------------------|
| ♣ Land Use | ♣ Air Quality | ♣ Threatened & Endangered Species |
| ♣ Farmlands | ♣ Noise | ♣ Historic |
| ♣ Social | ♣ Water Quality | ♣ Section 4(f)/6(f) |
| ♣ Relocation | ♣ Permits | ♣ Hazardous Waste |
| ♣ Economic | ♣ Wetlands | ♣ Visual |
| ♣ Pedestrians/
Bicyclists | ♣ Wildlife | ♣ Construction |
| | ♣ Floodplain | |

Social Impacts Analysis

- ♣ Questionnaires were administered to:
 - ♣ 64 households immediately adjoining the project corridor
 - ♣ 254 randomly selected households in rest of Syracuse
- ♣ Implementation of the survey began on June 2, 2004 and continued through June 12, 2004
- ♣ For the corridor-adjacent segment the number of completed questionnaires (47) represents a response rate of 73.4%
- ♣ For the city-wide sample 208 completed questionnaires were returned, representing a response rate of 81.5%

Social Effects of Build Alternatives

- ♣ The community-wide social impacts of all alternatives would be positive overall
- ♣ A Build Alternative would be responsive to broadly-expressed concerns about traffic congestion and the need for improvement in traffic flows in this portion of the city

Alternative	Summary of Social Effects	
	Positive Social Effects	Negative Social Effects
Option A – Centerline	<ul style="list-style-type: none"> Fewer relocations of homes/businesses 	<ul style="list-style-type: none"> Much higher number of proximity impacts Would adversely affect quality of life for most residents on project corridor
Option B – South Shift 1	<ul style="list-style-type: none"> Few proximity impacts Relocations evenly distributed between north and south Less impact to neighborhoods in east portion of corridor 	<ul style="list-style-type: none"> More relocations of homes/businesses than for Alternatives A, E, F
Option C – South Shift 2	<ul style="list-style-type: none"> Few proximity impacts 	<ul style="list-style-type: none"> Concentrates relocation impacts on south side where stronger localized social attachments are exhibited
Option D – North Shift	<ul style="list-style-type: none"> All relocations are on North where social cohesion & attachments are less evident than on South Few proximity impacts 	<ul style="list-style-type: none"> Highest number of relocations
Option E – Avoidance 1	<ul style="list-style-type: none"> Few relocations Few proximity impacts 	<ul style="list-style-type: none"> Relocations concentrated on south side where social cohesion is strongest
Option F – Avoidance 2	<ul style="list-style-type: none"> Least socially impacting alternative Least relocations Few proximity impacts 	

What Now?

♣ UDOT

- ♣ Continue Public Involvement
- ♣ Continue development of alternatives
- ♣ Environmental analyses
- ♣ Continue preparation of EIS

♣ Public

- ♣ Please fill out a comment sheet from tonight's meeting
- ♣ Watch for additional newsletters and attend upcoming meetings (every four months or so)
- ♣ Attend Public Hearing (early/mid 2005)

Right of way Acquisition

- ♣ **Appraisal** – When UDOT approves the purchase of land for highway purposes, the property owner will be contacted by an appraiser who will make a valuation of their property.
- ♣ **Acquisition** – Once the appraisal report is complete, an Acquisition Agent will make an offer to purchase the property at the appraised value.
- ♣ **Just Compensation** – A property owner should not be better or worse off after a right of way acquisition than before.
- ♣ **Advance Acquisition** – In limited cases, UDOT may acquire property before construction of a project has been approved. The property owner must request advance acquisition in writing and must demonstrate a hardship.
- ♣ **Payment** – After signing and approval of the right of way agreement, your payment should come within 30 days.

Relocation Assistance - Residential

- ♣ **Relocation Agent** – If you are displaced by a UDOT transportation project, a relocation counselor will contact you and provide you with the needed information on moving and available relocation assistance.
- ♣ **Moving Assistance** – If you are a qualified displaced person, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving.
- ♣ **Supplemental Payment** – If you are an owner and have occupied your home for 180 days or more immediately prior to the project, you may be eligible for a supplemental payment (in addition to fair market value for your property) for costs necessary to purchase a comparable replacement dwelling.
- ♣ **Rental Assistance Payment** – Owner occupants and tenants of 90 days or more may be eligible for a rental assistance payment.
- ♣ **Downpayment** – Owner occupants of 90 to 179 days and tenants of 90 days or more may be eligible for a down payment and incidental expenses.

Relocation Assistance –

businesses, farms, and nonprofit organizations

- ♣ **Relocation Agent** – If you are displaced by a UDOT transportation project, a relocation counselor will contact you and provide you with the needed information on moving and available relocation assistance.
- ♣ **Moving Assistance** – Owners or tenants may be paid on the basis of actual reasonable moving costs and related expenses or, under certain circumstances, a fixed payment.
- ♣ **Direct Losses of Tangible Personal Property** – Displaced businesses, farms, and nonprofit organizations may be eligible for a payment for the actual direct loss of tangible personal property which is incurred as a result of the move or discontinuance of the operation.
- ♣ **Searching Expenses for Replacement Property** – Displaced businesses, farms, and nonprofit organizations are entitled to reimbursement for actual reasonable expenses incurred in searching for a replacement property, not to exceed \$1,000.
- ♣ **Reestablishment Expenses** – A small business, farm, or nonprofit organization may be eligible for a payment, not to exceed \$10,000, for expenses actually incurred in relocating and reestablishing the enterprise at a replacement site.